

Amendments to the Specification are as follows:

Before the first sentence on page 1 please insert the following paragraph.

This application claims the benefit of priority to Japanese Patent Application No. 2002-356887, herein incorporated by reference.

Please amend the paragraph beginning on page 2, line 4 and ending on page 2, line 9 as follows:

In the force sense imparting type input apparatus applied to the steering apparatus, or the like, described above, driving power is always supplied to the actuator during driving of a vehicle and the actuator is likely to be over-heated. Therefore, various problems occur due to over-heating such as damage of the actuator, fuming, exothermy, and so forth.

Please amend the paragraph beginning on page 4, line 5 and ending on page 4, line 23 as follows:

As described above, the temperature sensor detects the temperature of the actuator and the power supply value to the actuator is lowered when the signal value of the temperature signal outputted from the temperature sensor is above a predetermined value set in advance. Alternatively, the controller calculates the temperature of the actuator and the power supply value to the actuator is lowered when the calculation value is above a predetermined value set in advance. In either case, the calorific value of the actuator can be restricted and the occurrence of various problems resulting from over-heating of the actuator can be prevented in advance. Because the supply of driving power of the actuator is not stopped and the application of the force sense to the operation portion is continued, operation stability of the operation portion can be maintained. When the driving power value supplied to the actuator is increased in a stage where the temperature of the actuator drops below a predetermined value, too, the difference of the force senses imparted to the operation portion can be reduced. Therefore, operation stability of the operation portion can be maintained.

Please amend the paragraph beginning on page 7, line 4 and ending on page 7, line 11 as follows:

The technology described in Japanese Patent Laid-Open No. 149324/2002 previously proposed by the applicant of this invention can be utilized for the construction of the driving mode control portion 8b. Incidentally, a control system for an actuator, a manual operation portion-3, an actuator 14 and an encoder 25 of this known reference correspond respectively to the driving mode control portion 8b, the operation portion 3, the actuator 5 and the position sensor 6 of this application.

Please amend the paragraph beginning on page 8, line 18 and ending on page 9, line 7 as follows:

In the force sense imparting type input apparatus according to this embodiment, the temperature sensor 7 detects the temperature of the actuator 5 and when the signal value of the temperature signal b outputted from the temperature sensor 7 exceeds a predetermined value set in advance, the power supply value to the actuator 5 is lowered. Therefore, the calorific value of the actuator 5 can be restricted and various problems resulting from over-heating of the actuator 5 can be prevented in advance. Because the supply of driving power to the actuator 5 is not stopped and the application of the force sense to the operation portion 3 is continued, operation stability of the operation portion 3 can be maintained. When the driving power value supplied to the actuator 5 is increased in the stage where the temperature of the actuator 5 drops below the predetermined value, too, the difference of the force senses imparted to the operation portion 3 can be decreased, and operation stability of the operation portion 3 can be maintained.

Please amend the paragraph beginning on page 12, line 4 and ending on page 12, line 23 as follows:

As explained above, in the force sense imparting type input apparatus according to the invention, the temperature sensor detects the temperature of the actuator and the controller lowers the power supply value to the actuator

or calculates the temperature of the actuator when the signal value of the temperature signal outputted from the temperature sensor exceeds the predetermined value set in advance, and lowers the power supply value to the actuator when the calculated value exceeds the predetermined value set in advance. Therefore, the calorific value of the actuator can be restricted and various problems resulting from over-heating of the actuator can be prevented in advance. Moreover, because the supply of driving power to the actuator is not stopped and the application of the force sense to the operation portion is continued, operation stability of the operation portion can be maintained. When the driving power value supplied to the actuator is increased in the stage where the temperature of the actuator drops below the predetermined value, too, the difference of the force senses imparted to the operation portion can be reduced. Consequently, operation stability of the operation portion can be maintained.